

Oberlin College Physics 110, Fall 2011

Assignment 4

Wednesday, 28 September

Reading: Read HRW chapter 6 (Force and motion, part II), concerning various kinds of force. This is nice stuff and it will clear up several questions you might have left over from chapter 5, but it's neither as important nor as central as chapter 5: read it with more or less intensity depending upon your interests.

Workshops: Review this week's Monday–Tuesday workshop material by reading the course notes, section 4.8 (“The range equation”).

The Wednesday–Thursday workshop for this week is “Pendulum Challenge”. Unlike the other workshops, it meets in room 113 rather than room 107.

Informal Friday: The optional Friday class meeting this week, on 30 September at 9:00 AM, will be by Professor Jason Stalnaker concerning “Counting the Cycles of Light: Using Laser Frequency Combs to Look for New Physics”.

Early warning: First **exam** coming up on **Wednesday, 12 October!**

Problems: Due Wednesday, 5 October.

- Additional problem 56: *A girl, a sled, and an ice-covered lake*
- Additional problem 58: *Monkey business*
- HRW problem 5-54: *Pulled penguins*
- HRW problem 5-55: *Blocks*
- HRW problem 5-57: *Wedge*
Instead of the variable names m_1 and m_2 , suggested by HRW, use m_r for the block lying on the ramp and m_h for the block that's hanging.
- HRW problem 5-58: *Window washer*
Omit parts (e) through (h).
- HRW problem 5-88: *Landing on Callisto*
- HRW problem 6-52: *Amusement park*
- HRW problem 6-57: *Orbiting puck*
- HRW problem 6-54: *Amusement park design*